

Code No: 21BA1T7

I MBA - I Semester Supplementary Examinations DECEMBER - 2024

DIGITAL TECHNOLOGIES FOR MANAGEMENT

Duration: 3 Hours

Max. Marks: 70

Note: 1. This question paper contains three Parts-A, Part-B and Part-C.

2. Part-A contains 8 short answer questions. Answer any **Five** Questions.
Each Question carries 2 Marks.

3. Part-B contains 5 essay questions with an internal choice from each unit.
Each Question carries 10 marks.

4. Part-C contains one Case Study for 10 Marks.

5. All parts of Question paper must be answered in one place

PART - A

1.a)	Mention any two examples of digital technologies commonly used.
b)	What is server less computing?
c)	List any two benefits of 5G technology.
d)	Define Management Information System.
e)	What is the primary role of MIS in an organization?
f)	Why is structured system analysis important in system design?
g)	Define a Decision Support System.
h)	How do Knowledge Management Systems benefit organizations?

PART – B

			BL	CO	Max. Marks
<u>UNIT – I</u>					
2.	a)	Explain the concept of digital technologies and their importance in modern management.			5 M
	b)	What are the main characteristics of digital technologies? Provide examples.			5 M
OR					

3.	a)	Discuss the scope of digital technologies in organizational management.	5 M
	b)	Analyze the impact of digital technologies on business operations.	5 M
<u>UNIT – II</u>			
4.	a)	Discuss the role of IoT in enabling real-time decision-making.	5 M
	b)	How does artificial intelligence contribute to digital transformation in management?	5 M
OR			
5.	a)	Analyze the applications of block chain in business operations.	5 M
	b)	Describe the role of 3D printing in revolutionizing the manufacturing sector.	5 M
<u>UNIT-III</u>			
6.	a)	What is the relationship between MIS and the user? Why is user involvement critical?	5 M
	b)	Analyze the impact of MIS on organizational communication and decision-making.	5 M
OR			
7.	a)	Outline the steps involved in the development process of an MIS.	5 M
	b)	Describe how MIS supports strategic and operational management decisions.	5 M
<u>UNIT – IV</u>			
8.	a)	Define a system and explain the need for system analysis in an organizational context.	5 M
	b)	Discuss the steps involved in the system analysis of an existing system.	5 M
OR			
9.	a)	How is system analysis for new requirements different from analyzing existing systems?	5 M

	b)	What is Object-Oriented Analysis and how does it differ from structured system analysis?	5 M
<u>UNIT – V</u>			
10.	a)	Discuss the features and benefits of Decision Support Systems in decision-making.	5 M
	b)	What is GDSS? Explain its role in group decision-making with examples.	5 M
OR			
11.	a)	What is a Knowledge-Based Expert System? Discuss its applications with examples.	5 M
	b)	Evaluate the importance of security in E-enterprises and the challenges they face.	5 M

PART –C

			BL	CO	Max. Marks
12.	<p>A global retail chain, ShopSmart, faced increasing competition from e-commerce platforms, which were offering more personalized shopping experiences. ShopSmart struggled to retain customers as traditional marketing strategies and inventory management practices were no longer sufficient. In response to these challenges, ShopSmart implemented an AI-driven personalization system to improve customer experience, streamline operations, and boost sales.</p> <p>The company identified three major issues: declining customer retention, ineffective marketing, and inventory management problems like overstocking and understocking. To tackle these, ShopSmart introduced an AI-powered solution that focused on personalizing customer experiences and optimizing operations.</p> <p>The AI system used machine learning and predictive analytics to offer personalized product recommendations based on customers' browsing history, preferences, and purchase patterns. Additionally, it enabled ShopSmart to send targeted promotions through email and mobile apps, improving customer engagement. AI also enhanced inventory management by predicting demand through</p>				10 M

analysis of historical data, market trends, and external factors like holidays or weather. This helped the company optimize stock levels, reducing waste. Furthermore, AI-powered chatbots provided real-time assistance to customers, handling queries related to products, order tracking, and general support.

As a result, ShopSmart saw impressive improvements. Personalized recommendations led to a 25% increase in average order value, while customer loyalty grew by 30%. Inventory costs were reduced, as demand forecasting improved stock management, cutting overstocking by 20% and stockouts by 15%. AI-powered chatbots managed 70% of customer interactions, reducing response times and improving customer support efficiency.

However, the implementation of AI came with its challenges. Data privacy and ensuring compliance with regulations such as GDPR were top concerns. There were also high initial costs for the system's implementation and staff training. Additionally, while AI brought significant benefits, some customers were initially skeptical of automated recommendations and chatbot responses.

Looking to the future, ShopSmart plans to integrate **AI-driven visual search** capabilities, allowing customers to search for products by uploading images. They are also considering deploying AI-powered robots in their warehouses to further streamline supply chain operations.

Questions

1. What were the main challenges faced by ShopSmart before implementing AI?
2. How did AI contribute to improving customer retention and sales for ShopSmart?
3. Explain how AI improved inventory management and reduced operational costs.
4. What challenges did ShopSmart face while implementing AI, and how could they address these issues?